TRUST AND RISK-TAKING AS A FUNCTION OF PRE-GROUP TRAINING

By

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To Michael, Moetke,
and Megan, who
didn't understand but
loved me anyway,

and

To Jay,
for all the days and hours.

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the number of secrets shared, and in their willingness to allow the experimenter to analyze the secrets. The groups did not differ on the trust scale or in their estimates of how painful they considered their secrets to be. Discussion to consensus led to a "conservative shift" in number of secrets to be shared. It was concluded that groups can be taught to behave in therapeutically relevant ways, that a climate of trust can thus be built up in a group, and that such a degree of trust generalizes to some extent. Implications for group therapy and suggestions for future research are discussed.

CHAPTER I
INTRODUCTION

Every therapist who has ever undertaken to lead a therapy group has done so with the implicit assumption that situational variables (behavior of the members in the group situation) can alter, modify, or in some manner influence the characteristic behaviors of the members as individuals, and that the alterations will be in a direction beneficial to the client. Some clients do show remarkable improvement and dramatic alterations in their ways of relating to other persons. But clinical data reveal that clients are not always so positively affected: their symptoms may be exacerbated, their maladaptive behaviors more deeply ingrained and resistant to change following the group experience.

What makes the difference? Experimental data are available to show that prediction of a subject's behavior in an interpersonal situation is more likely to be accurate when it is based on factors in the situation itself than on personality traits of the subject. Some personality variables that have been studied with these results are authoritarianism (Worthy, Gary and Kahn, 1969); trust as a personality variable (Schlenker, Helm & Tedeschi, 1973); levels of defensiveness and anxiety (Doster, 1975); self-esteem (Otis, 1975); and need for approval (Schofield, 1975). Experimental findings such as these suggest that the group therapist can maximize the probability of consistently beneficial effects for group members by careful structuring of the situation.

The concept of an externally imposed structure for a group therapy

situation is antithetical to the traditional conceptualization of the manner in which groups function; that is, that an ambiguous, unstructured situation is most conducive to client self-exploration and the natural development of the group (cf. Rabin, 1970). The necessity for ambiguity in therapy groups is derived from theories that stress the importance of a therapeutic relationship (individual as well as group) being unlike the client's historical relationships in which he has learned to behave in maladaptive ways (Singer, 1970).

But the experimental literature is replete with data on the detrimental effects of ambiguous situations on behavior, specifically the relationship between ambiguity and anxiety (Lazarus, 1966). A classic study by Dibner (1958) compared the amount of anxiety experienced by patients who were prepared for a psychiatric interview (told how to behave and what to expect) with that experienced by unprepared patients (highly ambiguous situation). Behavioral data, subjective reports, and GSR data from the patients all demonstrated that unprepared patients experienced a significantly greater degree of anxiety. The destructive effects of anxiety induced by ambiguity are also documented by studies of perceptual acuity (Postman & Bruner, 1948) and visual organization and synthesis of cues (Verville, 1946). When attention is divided, or when the individual has difficulty knowing which elements of a situation to attend to, the perception of speech is likely to be confused and distorted (Broadbent, 1972). And the destructive chain continues with distorted perceptions leading to increased anxiety (Korchin et al., 1958).

On the basis of their experience alone group therapists can testify to the evident anxiety, inappropriate behavior, and desperate looking to the therapist for help that occur in the initial meetings of groups.

Johnson (1963) and Yalom (1966) point out two additional experiences familiar to group therapists, i.e., that norms and behavior patterns established in early sessions tend to persist throughout the life of the group, and that as many as one-third of the group members drop out during the early (lst to 12th) group meetings. In the face of accumulating evidence of the deleterious effects of situational ambiguity on the behavior of clients in therapy, and in the light of their own experiences, clinicians have begun to make some attempts at preparing clients for the therapy situation.

Pretherapy Training

Bednar et al. (1974) have reviewed literature pertaining to the effects of pretherapy training on outcome in both individual and group psychotherapy. The reviewers describe the group literature as "consistent and impressive" in substantiating the effectiveness of pre-group training on outcome. The great majority of the studies were carried out with patient populations and used outcome measures such as personality inventories and therapist's ratings of clients' therapy behavior. Experimental manipulations fell into one of two categories: (1) verbal instructions; or (2) vicarious modeling.

Bednar et al. concluded that pretherapy training is effective when the therapist "deliberately and systematically prepares clients for group participation at a cognitive and behavioral level." Apparently the pretraining affects the interaction of the group members in a therapeutic manner so that the process of group therapy leads to client improvement. However, the relationship between the type of

training chosen and the process variable studied, and between process and outcome is unclear. For example, it is difficult to conceptualize how listening to excerpts of "good" patient in-therapy behavior can lead to decreased MMPI scores (Truax & Wargo, 1969), especially when no definition of "good" behavior is given.

Whalen (1969) conducted a study on pregroup training with a population of college students. In her study she clearly defined the variables which she was seeking to manipulate: particular types of verbal interaction, e.g., personal discussion and feedback. Whalen's study was limited to the effects of pretraining on group interaction, and no "outcome" variables were measured.

What seem to be lacking in the research are studies in which the critical factors in the group situation are defined and some relationship is established among pretraining, group process, and outcome.

Obviously the parameters of the group situation seen as crucial to client improvement depend on one's theoretical orientation; the critical process and outcome variables and their relationship to factors in the group situation are likewise dependent on one's conception of how therapeutic change takes place; and the most effective means of influencing the crucial group parameters depends on the researcher's conceptions in the areas stated above plus one's evaluation of the evidence as to how learning occurs.

Critical factors in the group situation. Most modern systems of psychotherapy are interpersonally based. Stemming from the basic theses propounded by Harry Stack Sullivan in his interpersonal theory of psychiatry, current psychotherapies view the origins of psychopathology as existing in disordered interpersonal relations; thus, the appropriate

method of treatment is also seen as essentially interpersonal. Even behavior theorists such as Wolpe regard "improved interpersonal relationships" as among the primary criteria for evaluating therapeutic change (Wolpe, 1969). Thus it would appear that the major characteristic of the group over which the therapist must exert some control is that of the ways in which the members behave toward each other. Such a statement seems both simplistic in its obviousness and antagonistic to the pusposes of group therapy: the idea that the therapist can or should control the members' behavior. Yet, when no consistent influences are brought to bear on the members' behavior in the situation one may observe the relative lack of structure and norm-ambiguity which lead to heightened anxiety and low risk-taking on the part of the group members.

What particular aspects of interpersonal relations have therapists considered relevant? One of the most frequently cited is what might be summarized as "interpersonal openness," or the "readiness to convey personal information about one's life, one's feelings, and one's impressions of other individuals" (Whalen, 1969, p. 510). Rogers (1959) emphasizes the importance of such behavior for both client and therapist, as do Jourard (1971), Gendlin (1970), and Mowrer (1964), and the encounter movement therapists (e.g., Bradford, 1964; Schutz, 1973). Even analytically oriented therapists such as Franz Alexander (1946) have recognized the importance of the client's experiencing in the present and honestly reporting that experience in order to undergo a "corrective emotional experience."

What are the factors which might contribute to a group situation in which the members consistently behave in an interpersonally open

fashion? The question of whether setting of norms can facilitate specific behaviors has been investigated with uniformly positive results. Ribner (1974) found that groups receiving an explicit group contract calling for self-disclosure increased significantly both their frequency and depth of self-disclosure.

The clearest demonstration of building into a group a norm of interpersonal openness is Whalen's study, in which the combination of a film demonstration modeling interpersonal openness and detailed instructions of expected behavior produced significantly greater effects than either independent variable alone. In explaining her results Whalen relied on an attention-information format detailed by Thibaut & Kelley (1959). The norm-sending process involved rule statements (filmed modeling plus instructions), surveillance-evaluation (presence of other group members), and application of sanctions (applied by the subject as well as the other group members). Such a conceptualization stresses the learning of complex verbal response classes, a type of learning requiring that the subject attend to the relevant variables in the situation rather than simply imitate a discrete response.

Interpersonal Trust

How can interpersonal openness contribute to the therapeutic effectiveness of the group for its members? One of the means by which group therapy is considered to bring about changes in an individual's habits and attitudes is through allowing him to try out new and different ways of relating to others in the group. Yalom (1970) has emphasized the importance of group feedback in modifying interpersonal distortions and

clarifying interpersonal relationships. However, an individual is unlikely either to risk such new behavior or, once having done so, to accept the feedback he receives except where group members share a fairly high degree of interpersonal trust.

Deutsch (1962) defined a trusting situation, as differentiated from a gambling situation, as one in which one "has much to lose or little to gain," probably the view most new group members hold of the therapy group. He reasoned that one needs "considerable confidence in a positive outcome" to trust. From his research on cooperation, competition, and trust, Deutsch defined trust in motivational terms: cooperative or competitive motives will determine the subject's behavior in the situation; but an individualistic orientation, neither cooperating nor competing but simply trying to maximize one's gains, resulted in the subject's behavior being much more influenced by the specific experimental conditions. In terms of Deutsch's model, if a group member exposes himself to possible criticism, ridicule, rejection, or even potential blackmail by other members, such behavior is indicative of trust -- "much to lose." Whether he engages in such behavior will be strongly influenced by situational variables; in this case the behavior of the other group members.

Schlenker, Helm, and Tedeschi (1973) offer a definition of interpersonal trust as "a reliance upon information received from another person about uncertain environmental states and their accompanying outcomes in a risky situation" (emphasis supplied). In that definition the importance of situational variables in the operation of interpersonal trust is even more central. And Rotter (1967, 1971) likewise emphasized reliance upon communications from other individuals in developing his

Interpersonal Trust Scale (1967). Interpersonal trust cannot be said to exist unless the person has some intelligible communication from another as to how the other will respond to his actions.

In a group therapy situation, how does a member come to trust, rely on, his fellow group members? Clearly the credibility of those relative strangers is a primary determinant (Gahagan & Tedeschi, 1968). And such credibility can only be based on past behavior in the group of the group members, since in a group therapy situation members typically know little, at least initially, of each other's behavior outside the group. In order to maximize the degree of interpersonal trust in a group, therefore, the members need some demonstration of what behaviors they can mutually expect under specified conditions. Interpersonal openness as a norm is the most likely vehicle to produce such a demonstration. Under such conditions members of the group may discern over a relatively brief period of time (1) to what degree each adheres to group norms, and (2) how each is likely to respond to candid admissions about one's feelings, experiences, or expectations. Such information is clearly more likely to produce interpersonal trust among the members than is the typical initial meeting of a therapy group in which social chitchat, exchanges of demographic data, and other such "low-risk" behaviors are the rule:

Hypothesis 1: Groups in which interpersonal openness is the norm will develop a higher degree of interpersonal trust than those in which no such clear norm is established.

Disclosure of Painful Secrets

Therapy patients bring with them to the group certain painful

secrets which they regard as (1) extremely important to their present problems and (2) too dangerous or embarrassing to reveal to anyone else. With the possible exception of psychoanalysts, most therapists do not regard the client's revelation of such secrets as crucial to his improved functioning. Thus, "self-disclosure" to the extent of revealing in detail one's greatest worries, shames, and fears has not been shown to be an effective or even desirable goal of psychotherapy.

Although Jourard (1971) and other humanistic psychologists have maintained that "Self-disclosure is a symptom of personality health and a means of ultimately achieving healthy personality," research findings have been contradictory. Cozby (1973) pointed out in his review of the self-disclosure literature that one reason for the difficulty in comparing results across studies is the lack of consistency in defining "mental health." And Allen (1973), reviewing the methodological limitations of self-disclosure research, has listed as primary the fact that the research is based on relatively nonintimate disclosures. Thus, the extension of findings from such studies requires substantial conceptual leaps. Particularly with regard to groups there is reason to question the therapeutic benefits to be gained from self-disclosure, since the majority of findings are based on self-report or dyadic interactions. Finally, "self-disclosure" has been defined in virtually all of the research in terms of the Jourard questionnaire or variants of it (Allen, 1973), and the validity of these measures has yet to be established.

Despite the lack of evidence establishing the therapeutic relevance of actual self-disclosure thus defined, an index of the extent to which we trust each other is our willingness to have them know our "painful

secrets" as we ourselves define them. We do not give our most powerful weapons into hands that are likely to turn them against us. One of the functions of the therapist in a group is to protect the individual group member who has attained such a degree of trust in the group from revealing such secret data at a time when the other members may not be ready to receive it. That is, when one has reached the stage of being willing to share, the actual sharing may be anticlimactic.

Hypothesis 2: Members of groups in which interpersonal openness is the norm will show a greater willingness to risk disclosing painful secrets than will members of groups in which no such norm has been established.

Establishing a Norm by Pregroup Training: Modeling

The studies by Deutsch and by Schlenker et al., indicate that subjects in a group situation will be likely to perform in accord with the norms of the situation. How can such a norm be established, and how can such complex verbal behavior as "interpersonal openness" be "built into" group members? Whalen's and Otis's research findings concerning the powerful effects of modeling on a subject's later behavior can be interpreted in terms of Bandura's social learning theory, which can be summarized as follows:

Behavior acquired through observational learning is coded into mediating images or words which are stored until appropriate environmental cues suggest that performance of the observed behavior is likely to be rewarded. The effects of modeling on the observer may be exercised through (1) acquisition of novel responses, (2) inhibition

or disinhibition of previously learned responses, depending on the consequences which the model is observed to experimence, or (3) facilitation of responses through focusing of the observer's attention on discriminative stimuli in the environment (Bandura, 1969).

Especially in the case of vicarious learning of complex verbal response patterns, the observer's attention must be focused on the essential elements of the model's behavior. As Whalen pointed out, what the subject must learn is a set of rules and regulations, rather than discrete responses; hence the importance of orienting instructions to the observer in facilitating the coding of verbal mediators. The effects of observational learning are maximized by such variables as a moderate degree of similarity of the model to the observer and the observer's arousal and motivational levels.

There is experimental evidence in support of Bandura's theory as it relates to observational learning of responses which deviate from the patterns of behavior which the observer would ordinarily expect in the situation in which the model is viewed. Apparently, the disinhibiting effects of the modeling occur through (1) establishing a norm for such behavior; and (2) providing discriminative stimuli that inform the observer as to when the norm is in operation (Freed, Chandler, Blake & Mouton, 1955; Grosser, Polansky & Lippit, 1951; Kimbrell & Blake, 1958; Walters & Parke, 1964).

According to Bandura's theory of observational learning and the experimental evidence supporting that theory, Hypothesis 3 is stated as follows:

Hypothesis 3: Groups of individuals exposed to explicit, detailed instructions and to a videotape of a group in which

the members model interpersonal openness will engage in significantly more interpersonally open behavior than will groups who do not receive such pretraining.

In summary, it was hypothesized that pretraining via modeling and detailed instructions would lead to greater interpersonal openness on the part of group members; that such openness would in turn result in more interpersonal trust among the members; and that a greater degree of interpersonal trust would also be reflected in a greater willingness to risk disclosure of painful secrets to the group.

The Risky Shift

Studies using the Choice Dilemma Questionnaire developed by Kogan and Wallach (1964) have often found a shift in decision-making in a "riskier" direction following group discussion. However, the shift is not uniform for all items (some shifting consistently in a more conservative direction), and stronger risky shifts are associated with items having the least serious consequences (Dion, Baron & Miller, 1970). Explanations of the phenomenon have been many and varied, including the decision-making model of Pruitt (1971); a social-comparison interpretation (Jellison & Riskind, 1970, 1971); and the expected-utility model of Vinokur (1971), recently amplified in the subjective expected utility model of Kahan (1975).

As pointed out by Dion et al., however, a strong reservation in interpreting the results of any risky-shift study using the CDQ is the extent to which the tasks lack any (much less severe) consequences for the group members. And Freedman (1969) argues cogently against the

generalizability of such studies on the basis that people are very poor predictors of their own behavior.

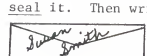
Those few recent studies using designs having real consequences for the subjects have obtained mixed results (Blascovich, Ginsberg & Veach, 1975; Blascovich, Veach & Ginsberg, 1973; McCauley, Stitt, Woods & Lipton, 1973; Yinon, 1975). It seems reasonable at this point that theoristic explanation should wait upon further research involving consequences that are real and personal to the subjects.

The present study has as one of its aims an investigation of shift in risk-taking as it pertains to the actual behavior of group members in a situation where they have much to lose in the form of sharing painful aspects of themselves with relative strangers. A shift in the "risky" direction would presumably indicate an expected positive outcome to the group members of sharing their secrets which would outweigh an expected loss, the possibility of embarrassment or ridicule.

CHAPTER II
METHOD AND PROCEDURES

Subjects

The subjects were 72 female undergraduate students enrolled in introductory psychology courses at the University of Florida, who volunteered to participate in order to fulfill one of the requirements of the course. The subjects were told that two experimental sessions, one week apart, would be held and that participation in both was required. Any subject who indicated she would be unable to attend the second session was eliminated from the study.

As a pretreatment condition each subject was seen individually in a private room and given written instructions as follows: "Here are 20 slips of paper and an envelope. You are to write on each slip of paper a secret about yourself that you would not be willing to share with a group of female strangers. For most people such secrets center around subjects such as sex, violence, failures, loneliness, mental health, stealing, cheating, and so on. However, these are only examples, and you should not be limited to them. After you have finished, fold the slips of paper, place them in the envelope, and seal it. Then write your name across the flap of the envelope like this.  After you are finished, I will lock your envelope in this file cabinet. I have the only key, and no one will ever read what you have written unless you decide on your own to show it to them. The envelope will be returned to you after the study is over. When you have finished, please call

me." The subject areas for the secrets were taken from data on intimate secrets obtained by Norton, Feldman & Tayofa (1974). When a subject had finished the pretreatment phase she was randomly assigned to one of three treatment conditions and to one of six groups of four within that condition. An exception to the randomness was that no subject was assigned to a group in which she was acquainted with the members.

Procedure

Condition 1. Interpersonal openness. Condition 1 was an attempt to structure the six groups in that condition in such a way as to maximize interpersonal openness. The videotape model and instructions were adapted from those used by Whalen and described in detail in her study as "Film-detailed instructions condition."

The videotape model consisted of a twelve-minute, untitled videotape recording (VTR) produced for this study. Data from previous studies (e.g., Bandura, Ross & Ross, 1963; Otis, 1975) indicate that videotaped models are as potent as live models in eliciting imitative behavior. In the VTR a group of four females conversed after implying that they had just met. Two of the participants spent a few seconds conveying biographical information, and then a third member, interrupting, maintained that the group members were not using the best method of getting to know each other. For the remainder of the time the participants talked on a more personal level, describing their anxieties and other feelings, and feeding back their impressions -- whether positive, negative, or neutral, of the other group members. An attempt was made to make the VTR group appear as similar as possible in composition to the subject groups, e.g., in age, sex, and dress.

Similarity between subjects and models was maximized because of the possibility that large subject-model differences might lead the subjects to conclude that behavior matching was inappropriate, unnecessary, or impossible (Goldstein, Heller & Sechrest, 1966; Hollander, 1958).

Detailed instructions to the interpersonal-openness groups were given in written form and also by audiotape as follows: "This is a group dynamics laboratory. It is a rare opportunity to improve your ability to communicate with others by learning how you appear to them; that is, how you present yourself and what impressions they form about you. To accomplish this, it is important that you be open and honest with other members of the group and discuss freely your immediate feelings, attitudes, and opinions, both about yourself and others in the group. The information used to form your impressions of the other group members will come from their appearance, words, and behavior. We want you to feed back your impressions to the others as soon as the impression is formed in your mind. This will be difficult, but it is essential to obtain the maximum benefits from the experience. The amount you learn about yourself will depend on the extent to which you participate in the group.

"To show you what we mean by open discussion of feelings and feedback of impressions, we are going to show you a videotape of a group similar in composition to yours. The group members in this tape provide excellent examples of desirable types of group behavior. You will note that they are open in talking about themselves. In addition, they freely express their immediate impressions of other members of the group, and each member makes an honest effort to accept and examine the truth or falsity of the impression as it applies to her.

"After the tape you will form your own group, and we would like you to try and interact in a manner similar to that of the videotape group. No experimenter will participate in your group, but an observer will be watching through the one-way mirror in order to record the interaction variables we are examining.

"After you have seen the tape you may begin. You will have 40 minutes, and you will be notified when your time is up. Remember, it is important that you openly discuss your feelings and immediate impressions of others in the group, as well as invite similar comments about yourself.

"Next week at this same time you are to return to this room for your second group session."

Condition 2. Therapy group. Condition 2 was an attempt to have the six groups in that condition vicariously experience a typical initial meeting of a therapy group. Participants in the videotape model were the same as those on the videotape used in Condition 1. However, interaction among the group members in the tape was limited to the following categories: (1) exchange of demographic data; (2) comments about the physical environment (building, rooms, chairs, etc.); (3) wondering aloud about how to proceed (to "get to know each other"); (4) extragroup process (Whalen's term for impersonal discussion unrelated to the group or the experiment); (5) laughter, silences, grunts, etc.

Instructions to groups in the therapy-group condition were given as follows: "This is a group dynamics laboratory. We are interested in examining some variables important in the development of group interaction. To help us to study these variables we will ask you to

interact as a group and to try to get to know each other. In order to help you gain a clearer understanding of how a group like yours might function, we will show you a videotape of four people in a situation similar to the one you will find yourselves in. After the tape is over you may begin your own interaction. No experimenter will participate in your group, but an observer will be watching through the one-way mirror in order to record the interaction variables we are examining. You will have 40 minutes, and you will be notified when your time is up.

"Next week at this same time you are to return to this room for your second group session."

Condition 3. Control group. Condition 3 was an attempt to examine the effects of a group's simply meeting together (after viewing a videotape not depicting group interaction) on the dependent variables under investigation. The videotape shown was of the same length as those shown to groups in Conditions 1 and 2 and with the same participants, but depicting simply a variety of modes of interaction (teaching, working at a task together, drinking and eating together).

Instructions to the groups in the control-group condition were the same as those for Condition 2 groups, except that description of the VTR was altered as follows: "This is a group dynamics laboratory. We are interested in examining some variables important in the development of group interaction. To help us study these variables we will ask you to interact as a group and to try to get to know each other. In order to help you get in the mood for your group experience, we will show you a videotape of people interacting in various ways. After the tape is over you may begin your own interaction. No experimenter will participate in your group, but an observer will be watching through the one-way

mirror in order to record the interaction variables we are examining. You will have 40 minutes, and you will be notified when your time is up.

"Next week at this same time you are to return to this room for your second group session."

Each of the groups in the three conditions saw their VTR and received their instructions as a group but apart from the other seventeen groups. Each group met in a room containing four chairs located around a circular table with each chair partly facing a one-way mirror. Observing and videotaping was done from the adjoining room. The subjects were met by the experimenter when they entered the experimental room and were asked not to talk to the other group members until the experiment began. When all four subjects had arrived, the experimenter passed out the written and played the taped instructions, and then showed the VTR appropriate to the particular treatment condition.

After the subjects had seen the tape and before the experimenter left the room she handed out a 5 x 8 index card and a marking pen to each subject, requesting that she write her first name on it, fold it in half, and stand it up on the table in front of her so that the other members could see it. The experimenter then left the room. After 40 minutes had elapsed, the experimenter re-entered the room to end the interaction, to remind the group that they were due back for the second session one week later, and to request that they not discuss the experiment with their friends.

The second session. One week after the first group meetings all groups returned for a "second session." Before the second session began, each subject was left alone in a private room to fill out Rotter's Interpersonal Trust Scale. After she had completed the Scale (reproduced in Appendix A),

she was handed an empty envelope, her original envelope containing her 20 secrets, and a typed instruction sheet which read as follows: "Please take out of your envelope at random -- that means, without looking into the envelope -- as many, from zero to twenty, of the slips of paper as you are willing to put in the pot for discussion in the group tonight. The actual discussion session of your group will not be recorded tonight. Please put the slips of paper you select into this second envelope, write your name across the front of it, and drop it in the bowl on the table. Hold on to your original envelope and call me."

When the four members of a group were assembled the experimenter instructed them as follows: "Before you begin your group tonight I would like you to discuss among yourselves the number of secrets which each member of your group should contribute to discussion. You are not to discuss the content of the secrets but only the number, and you must agree as a group on one number." Discussion to consensus was videotaped. This portion of the experimental manipulation was a check on whether the risky-shift phenomenon was operating in these groups. After consensus was reached, the experiment was over, and the subjects were debriefed regarding their expectations and hypotheses about the experimental manipulations.

Each subject was seen individually at this point and given a slip of paper on which she was asked to rate on a scale from 1 to 7 how painful or embarrassing her secrets were (a rating of 1 representing "not embarrassing or painful at all" and a rating of 7 representing "extremely embarrassing or painful"). She was then given a typewritten slip of paper with directions as follows:

"You were told that no one would ever read your secrets

unless you decided on your own to share them. That is still true. However, if you have no objections, I would like to analyze the content of your secrets. This could be done by your tearing open both your envelopes and dumping the contents into a bag with other secrets so that I would never know to whom a secret belonged. However, this is not an integral part of the experiment and I want you to feel free to refuse if you have any reservations."

Dependent Variables

The dependent measures consisted of (1) mean score for each group on the Interpersonal Trust Scale; (2) behavioral data in the form of mean number of secrets per group selected to share with the group; (3) ratings of the total verbalizations of each group on a revised version of Whalen's rating scale; and (4) differences between (a) mean number of secrets chosen for sharing by group members prior to discussion to consensus and (b) number agreed upon by each group.

Interpersonal openness rating scale. For purposes of this study the six broad response categories of Whalen's scheme were used. They are described in detail below. The descriptions following each response category were taken as criteria upon which the judges based their ratings.

Response categories:

1. Personal discussion. (a) Personal self-disclosure: Discussion of feelings, attitudes, and behaviors unrelated to current group interaction which are non-public, not ordinarily readily volunteered, and

which may make the individual vulnerable to negative evaluations from others. Examples of actual comments categorized as personal self-disclosure by Whalen's raters are "I'm a status seeker like a lot of people," "I might even try homosexuality," or "I just broke down and started yelling and screaming." (b) Immediate feelings: Discussion of feelings and attitudes related to current group interaction which are relatively private, not ordinarily volunteered by most people, and which may make the individual vulnerable to negative evaluations from others (e.g., "I feel alienated here" or "Now I'm embarrassed"). (c) Personal questions: Questions relating to an individual's opinions, feelings, or actions which are usually considered to be private information: "Have you always been heavy?" or "I wondered how you felt when we were so silent."

2. Feedback. (a) Positive feedback: The conveying of an individual's positively valenced impressions of or reactions to the comments, appearance, or actions of another group member. This category includes compliments, flattery, etc. Examples are "I like the way you said that," or "You seem like an alert, intelligent person." (b) Negative feedback: Negative evaluation of the personality, intelligence, actions, etc. of another group member. This category includes hostility, ridicule, criticism and implications that the individual is not telling the truth. Examples of comments rated as negative feedback are "You were a fool," "Big deal!" or "Your argument isn't very rational." (c) Neutral feedback: This category includes comments about a group member that cannot be evaluated as either positive or negative, as well as direct advice from one group member to another. Some examples are "You seem like the silent type" or "You ought to go up

and tell her." (d) Acceptance of feedback: Acceptance by a group member of the positive, negative, or neutral feedback she receives, for example, "Yeah, I guess you're right." (e) Reject feedback: Refusal to accept the feedback about oneself provided by other group members, for example, "No, you see it's really like this . . ." (f) Request feedback: A direct request that the group or particular members provide the subject with an evaluation of herself, for example, "What do you think of me?"

(These first two responses classes comprised the primary types of interaction modeled in the videotape recording for the interpersonal-openness groups.)

3. Impersonal discussion. (a) Impersonal self-disclosure: Nonpersonal biographical information about oneself which is either generally accessible or readily volunteered in appropriate contexts by most people. Examples: "I come from Chicago" or "I don't know the outskirts of the city very well." (b) Extragroup process: Nonpersonal topics unrelated to the experiment or the group interactions -- "All universities don't accept correspondence courses" or "I know a girl who is in the Navy now." (c) Impersonal questions: Questions regarding public, easily accessible, readily volunteered information about a group member -- "Have you ever seen the San Diego campus?" or "How many hours are you taking?"

4. Group process. Nonpersonal discussion relevant to the experiment such as comments regarding the experimental manipulations, the purposes of the experiment, the behavior of the experimenter or participants in the VTR, a plan of action, etc. Examples: "Are they watching us?" or "Let's all talk at the same time -- that ought to

goof them up."

5. Descriptive aspects of communicative speech: (a) Agreement: Any verbal indication of agreement, for example, "Uh huh," and "Yeah, that's right." Head nods are not scored. (b) Disagreement: Any verbal indication of disagreement, for example, "NO," and "That's not true!" Head nods or shakes are not scored. (c) Laughter: Any amount of audible giggling or laughing by one or more group members. Smiles and grins are not scored. (d) Silence: This category is scored only if the duration of the silent period exceeds 3 seconds. (e) Interruption: Scored whenever one group member stops another from talking or when two or more individuals are speaking simultaneously.

6. Unscoreable utterances. A scoring category for those remarks which are either inaudible, unintelligible, or too difficult to categorize immediately.

Rating procedure. The middle twenty minutes of discussion for each of the eighteen groups was rated independently by two trained raters using an Esterline-Angus event recorder. The resultant scores described total group interaction in terms of number of seconds spent in discussion rated as falling into each of the response categories (no ratings of individual members).

The raters were advanced graduate students in clinical psychology who were trained on practice tapes to a criterion of 94% agreement on a tape. After training, the raters also analyzed the three modeling tapes in terms of time spent in each of the six response categories.

CHAPTER III
RESULTS

Interrater Reliability

To determine whether the raters were reliable in their judgments of the total number of seconds spent in each category of discussion, Spearman's rank correlation coefficient was computed for the 108 pairs of scores. (Appendix A shows the raters' scores.) The resulting test statistic of $r_s = .986$ is highly significant ($p < .001$). Individual correlation coefficients were also computed over the 18 groups for each of the six categories. The results are shown in Table 1.

Table 1

Interrater Reliability

Response Category	Spearman's r	p
Personal discussion	.999	.01
Feedback	.955	.01
Impersonal discussion	.981	.01
Group process	.944	.01
Descriptive aspects of communicative speech	.964	.01
Unscoreable utterances	.844	.01

Since interrater reliability was judged to be satisfactory, the average of the two raters' scores was used in further computations.

Analysis of the Modeling Tapes

To determine whether the three 12-minute tapes used in the three treatment conditions actually depicted the types of verbal interaction which they were designed to model, the judges rated each of the tapes separately. Each verbalization was rated as falling into one of the six response categories.

The modeling tape for the interpersonal-openness condition was designed to depict primarily the categories of personal discussion and feedback, since those were the types of verbalizations which the interpersonal-openness groups were supposed to model. Tapes for the therapy-group and control-group conditions were designed to model primarily impersonal discussion. As can be seen from Table 2, the tapes did model the types of verbal interaction for which they were designed. (The interpersonal-openness condition tape included some personal discussion as an example of the kind of interaction which was not to be modeled by the subjects.)

Table 2

Analysis of Modeling Tapes: Time (in seconds) and Percent of Total Time Spent in Each of the Six Response Categories

Response Category	Inter-personal Openness	%	"Therapy" Group	%	Control Group	%
Personal Discussion	417	58	0	0	0	0
Feedback	83	12	0	0	0	0
Impersonal Discussion	87.5	12	680.5	95	575	80
Group Process	78.5	11	0	0	0	0
Descriptive aspects of Communicative Speech	54.0	07	39.5	5	145	20
Unscoreable Utterances	0	0	0	0	0	0
	720.0	100	720.0	100	720.0	100

Analysis of the Subjects' Interaction in the Groups

From the forty minutes of interaction had by each group, a videotape of the middle twenty minutes was analyzed by the raters with each verbalization judged as falling into one of the six response categories (personal discussion, feedback, impersonal discussion, group process, descriptive aspects of communicative speech, and unscoreable utterances). The Kruskal-Wallis one-way analysis of variance was used to determine whether significant differences existed among the groups in the three treatment conditions with regard to the number of seconds spent in each category. Results of the analysis showed that the groups differed among themselves significantly in three of the response categories: personal discussion ($p < .01$), feedback ($p < .05$), and impersonal discussion ($p < .01$). Table 3 shows the results of the analysis.

For each of the response categories in which a significant difference among the groups was found, the Mann-Whitney U Test was performed to determine where the differences lay. As can be seen from Table 4, groups in the interpersonal-openness condition spent a significantly greater amount of their time in personal discussion and a significantly lesser amount of time in impersonal discussion than did groups in the therapy-group and control-group conditions, which did not differ significantly from each other. In the category of feedback, the only significant difference was between the interpersonal-openness and the therapy-group conditions.

Table 3

Mean Number of Seconds, Percent of Total Time, and Kruskal-Wallis Analysis of Variance for the Three Treatment Conditions

Response Category	Condition Means and Percent						
	Interpersonal Openness		Therapy Group		Control Group		
	Mean	Percent	Mean	Percent	Mean	Percent	H
Pers Disc	1112.83	45.1	8.00	.3	12.58	.5	12.51**
Feedback	107.92	4.5	0.00	.0	9.92	.4	6.12*
Impers Disc	1002.42	42.5	2178.08	90.2	2206.42	91.5	9.58**
Group Process	59.08	2.4	44.83	1.9	28.00	1.2	.07
Descrip	116.63	4.9	165.50	6.9	140.33	5.8	4.16
Unscore	13.75	.6	16.92	.7	13.33	.6	.26
	2412.63	100.0	2413.33	100.0	2410.58	100.0	

*$p < .05$

**$p < .01$

Table 4

Differences between Pairs of Treatment Conditions on the Three Significantly Different Response Categories

Response Category	Treatments (in Increasing Order of the Means of the Ranks)		
Personal Discussion	T-G	C-G	I-O
Feedback	T-G	C-G	I-O
Impersonal Discussion	I-O	T-G	C-G

Note: Treatments connected by a line are not significantly different at the .05 level.

Comparison of Groups and Their Models

Figures 1 through 3 represent comparisons of the percent of time spent by group members and by their models in the six categories of discussion. Groups in the therapy-group and control-group conditions most closely matched their models. In the interpersonal-openness condition the groups matched their models except in the category of impersonal discussion, where the group members spent 42.5% of their time, compared to the models' 12%.

Dependent Measures

To determine whether the groups in the three treatment conditions differed among themselves with regard to the five separate response variables, the Kruskal-Wallis one-way analysis of variance was computed for each of the dependent variables. Reference to Table 5 shows that the groups did differ significantly on three of the dependent variables:

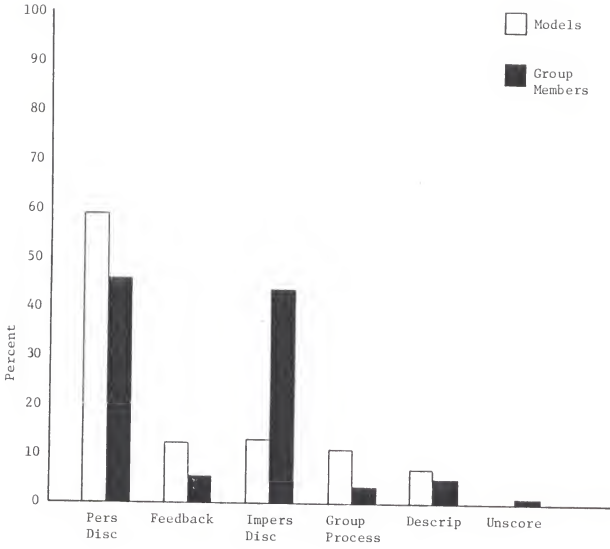


Figure 1. Comparison of models and groups in the interpersonal-openness condition on percent of time spent in each of the six categories of response.

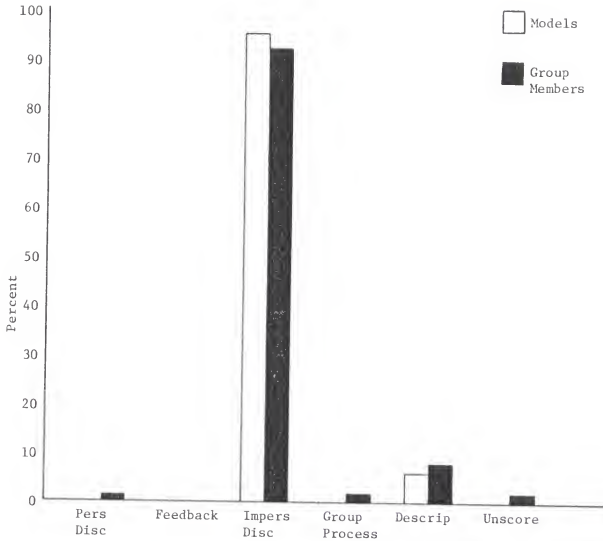


Figure 2. Comparison of models and groups in the therapy-group condition on percent of time spent in each of the six categories of response.

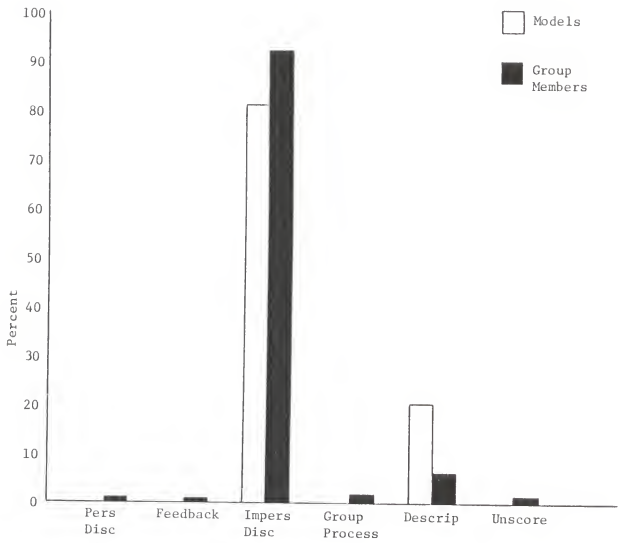


Figure 3. Comparison of models and groups in the control-group condition on percent of time spent in each of the six categories of response.

mean number of secrets which they were willing to share ($p < .05$); mean number of group members willing to allow the experimenter to analyze the content of their secrets ($p < .01$); and mean number of secrets which the group as a group agreed to reveal after discussion to consensus ($p < .05$). The groups did not differ on their individual ratings of how painful or embarrassing they considered their secrets to be or on their mean scores on Rotter's Interpersonal Trust Scale.

Table 5

Differences Among the Treatment Conditions on the Five Dependent Variables

Dependent Variable	Interpersonal Openness Mean Rank	Mean	Therapy Group Mean Rank	Mean	Control Group Mean Rank	Mean	H
Secrets shared	14.33	7.16	7.00	2.96	7.17	2.78	7.38*
Analysis of secrets permitted	15.00	4.00	7.30	2.16	6.17	2.0	10.50**
Painfulness of secrets (1-7)	10.50	4.80	10.25	4.68	7.75	4.53	.98
Trust-Scale Scores	6.22	66.75	12.25	69.53	6.92	64.66	3.02
Secrets chosen by consensus	14.00	2.70	8.50	1.00	6.00	.37	7.67*

*$p < .05$
**$p < .01$

For each of the dependent variables on which the groups differed significantly, the Mann-Whitney U-Test was performed for each pair of treatment conditions. As Table 6 shows, groups in the interpersonal-openness condition were willing to share a significantly greater number of their secrets with other members of their group, and more of the group members were willing to permit the experimenter to analyze their secrets, than were groups in the other treatment conditions, who did not differ significantly from each other. As to the mean number of secrets which the groups agreed to share after discussion to consensus, the significant difference ($p < .05$) occurred between groups in the interpersonal-openness condition and those in the control-group condition.

Table 6

Differences Between Pairs of Treatment Conditions on the Three Significantly Different Dependent Variables

Dependent Variable	Treatments (in decreasing order of the means of the ranks)		
Secrets shared	I-O	C-G	T-G
Analysis of secrets permitted	I-O	T-G	C-G
Secrets chosen by consensus	I-O	T-G	C-G

Note: Treatments connected by a line are not significantly different at the .05 level.

Table 7 is a further analysis of the "risky-shift" data. By reference to that table it can be seen that the groups in the three treatment conditions differed significantly in the number of secrets which they were willing to share both before and after discussion to consensus ($p < .05$). However, after discussion to consensus the only significant difference was between the interpersonal-openness and control-group conditions. The differences between the number of secrets subjects were willing to share before and after discussion were significant in each of the treatment conditions and were all in the direction of a "conservative" rather than a "risky" direction (Sign Test).

Table 7

Comparison of Mean Number of Secrets Subjects Were Willing to Reveal Before and After Discussion to Consensus

	Interpersonal Openness	Therapy Group	Control Group	p
Before Discussion	7.16	2.96	2.78	.05
After Discussion	2.70	1.00	.37	.05
Shift	5.46	1.96	2.41	
p	.02	.03	.02	

Note: Treatments connected by a line are not significantly different at the .05 level.

To discover whether the groups differed among themselves with reference to the amount of time they spent in their discussion to consensus, the Kruskal-Wallis test was performed. The mean amount of time

in minutes for groups in each treatment condition was as follows: interpersonal-openness, 6.46; therapy-group, 3.28; control-group, 10.34. The groups did not differ significantly at the .05 level.

CHAPTER IV
DISCUSSION

The results of the study are discussed in the order in which the data were obtained and analyzed. The effects of modeling (Hypothesis 3) are discussed first, followed by their influence on group interaction and the outcome variables (Hypotheses 2 and 1, respectively).

Hypothesis 3: The Differential Effects of Modeling

As Whalen and others have shown, complex verbal response patterns can be taught to groups by the use of descriptive and exhortative instructions and the use of videotape models of interpersonally open verbal interaction. The data from this experiment support this finding and additionally indicate the need for specific instructions and unambiguous models to facilitate a particular verbal behavior.

Apparently, personal discussion as defined herein is a more difficult behavior to inculcate in group members than is impersonal discussion. The data show that, even with the use of models whose interaction included very minimal impersonal discussion, the subjects produced more than three times as much impersonal discussion as the models exhibited. In the groups viewing models of primarily impersonal discussion the interaction matched the models much more closely. However, the only condition in which personal discussion predominated was that in which the models exhibited it as the primary means of interaction.

Thus, while interpersonally open behavior is difficult to induce, the interpersonal-openness models and instructions used in this study were effective in producing a significantly greater amount of that behavior as compared to the other two conditions, the therapy-group and the control-group.

An additional essential element in effective modeling other than the clarity of the behavior to be matched and the explicit instructions appears to be motivation. Only groups in the interpersonal-openness condition received as part of their instructions the statement that "[This] is a rare opportunity to improve your ability to communicate with others by learning how you appear to them; that is, how you present yourself and what impressions they form about you." A motivational factor was also present in the modeling tape in that a member who was open was reinforced by the other group members with positive feedback. It seems probable that the treatment effects in the present study were exerted through Bandura's principle of disinhibition of a previously learned response due to the positive consequences experienced by the models. Lakin and Carson (1966) have observed that people most often avoid engaging in personal discussion because of the fear of being perceived as weak and inadequate. To counteract such a fear and disinhibit the modeled response, the subject must have been motivated by an expectation of positive consequences.

Thus, Hypothesis 3 is supported with the qualification that sufficient motivation in the subjects to model the behavior must also be induced.

Hypothesis 2: Willingness to Disclose Painful Secrets

Hypothesis 2 is supported by the finding that members of groups in the interpersonal-openness treatment condition were willing to disclose a significantly greater number of secrets to their fellow members than were subjects in the other two treatment conditions. The fact that the subjects did not differ across conditions in terms of how painful or embarrassing they considered their secrets to be indicates that the same degree of risk obtained for all the group members.

Hypothesis 2 predicted that the readiness to risk disclosing secrets would be related to the presence or absence of a norm of interpersonal openness. Analyzing the treatment condition in terms of the norm-sending process detailed by Thibaut and Kelley (1959), one finds that the three components of norm-sending were clearly present only in the interpersonal-openness condition. The components and their counterparts in the present study are (1) rule statements (instructions and videotape); (2) surveillance-evaluation (presence of other group members and the experimenter's observation from the next room); and (3) application of sanctions (applied by the subject and the other group members in the form of rewards for interpersonal openness; the expected reward promised in the instructions of "improving your ability to communicate with others . . ."). Additionally, the finding that groups in the interpersonal-openness condition actually spent approximately half of their time in personal discussion and feedback indicates that a norm of interpersonal openness was operating.

There is also some support for the idea that a norm of interpersonal openness generalized outside the group. Such support is found in the fact that a significantly greater number of members of groups in

the interpersonal-openness condition were willing to permit the experimenter to analyze the content of their secrets. The readiness to allow a stranger to read what one had previously identified as secrets one would not be willing to share, even when promised anonymity, indicates at least a state variable of being open about one's self. It is also worth emphasizing that there was no pressure on any of the subjects to permit analysis of the content of their secrets; indeed, one-third of the subjects in the therapy-group and in the control-group conditions declined to allow such analysis.

Hypothesis 1: Interpersonal Trust

Members of groups in the three treatment conditions did not differ significantly on the variable of interpersonal trust as measured by Rotter's Scale. The means for all of the groups were well within one standard deviation of the mean for the standardization group of females and also for a group of 411 females at Ohio University recently studied by Wright & Tedeschi (1975), indicating that the population from which our samples were drawn does not diverge markedly from the norms for this scale.

Rotter speaks of interpersonal trust as measured by his scale as a "generalized expectancy that the oral or written statements of other people can be relied upon." In thus describing this variable he differentiates it from expectancies specific to the situation in which an individual finds himself. In other research such a differentiation is sometimes described in terms of "trait" versus "state" variables. Thus Rotter would predict that scores on his scale would remain relatively stable over time, since generalized expectancies are based on long-term

life experiences with parents, teachers, and peers.

As measured by Rotter's scale, then, interpersonal trust is an attitude that would not be expected to fluctucate over such a short period of time as was involved in the present study unless some very dramatic change occurred in the lives of the group members. Apparently, the experimental manipulation, while it was effective in altering the expectancies of the subjects relative to the specific situation of the experiment (witness the significant differences on other dependent variables) was not potent enough to effect a change in what might be thought of as a personality or trait variable of trust. Such an effect as personality change might be obtained over a longer period of time with repeated experiences in groups such as those in the present study. One would expect that a successful therapy-group experience might produce such a shift in attitude.

Alternatively, if interpersonal trust is less narrowly defined, the data on the subjects' willingness to share secrets and to allow them to be analyzed by the experimenter could be taken as an indication that trust in other persons was affected differentially by the treatment conditions. Certainly, some degree of trust is indicated by a readiness to disclose painful aspects of one's self to others. However, such a conclusion is limited in its applicability until further research demonstrates that the effects endure over time and across other groups or individuals. Hypothesis 1 is not clearly supported by the data obtained in the present study.

The Risky Shift

Groups in all three treatment conditions shifted significantly in

a conservative direction following discussion to consensus on number of secrets to be shared. However, after discussion the difference between groups in the interpersonal-openness condition and those in the therapy-group condition disappeared. Groups in the control-group condition were not significantly different from those in the therapy-group condition.

The reasons for such a uniformly conservative shift are difficult to discover. Each group member decided on her own to reveal a certain number of secrets. Yet, apparently she was not willing to impose on other group members a greater degree of risk than she had accepted for herself. One could also theorize that the less trusting members of the group prevailed; an element of distrust in the person of one reluctant member might have dissipated the atmosphere of trust built up in the group. In sum, being unsure of the reasons for a member or members' reluctance to disclose her self to any degree, the other members may have concluded (a) that they should not try to persuade her (or them) otherwise; or (b) that perhaps that person or persons was not really so trustworthy as they had thought. Certainly, in therapy groups a client is often heard to say, after the session is over, that he or she had planned to talk about such-and-such a topic, but had lost the courage to do so when other members seemed reluctant to expose themselves.

Unlike studies using the Choice Dilemma Questionnaire, the present study involved a real and personal risk for the group members. It would seem that the gain to be expected from taking such a risk was, in this case, outweighed by other factors which became operative only in the context of the discussion to consensus. What those factors were is a matter of speculation. However, further research involving analysis of

the videotaped discussions might possibly reveal the answers. Such an analysis is beyond the scope of the present investigation.

Conclusions

The results of the present study suggest some important conclusions for the theory and practice of group psychotherapy. If the data herein can be viewed tentatively as applicable to a clinic population, we might conclude:

1. That members of a group can be taught to behave in therapeutically relevant ways (e.g., relating in an interpersonally open manner);

2. That such training can be carried out in a simple and practical manner through the use of brief instructions and videotape models;

3. That, when members of a group engage in such interpersonally open behavior, a climate of trust is built up wherein the group members become willing to share with each other painful and embarrassing aspects of their lives;

4. That, while the actual disclosure of such secrets is not necessarily a sine qua non of therapy, the readiness to do so may be; and

5. Finally, that trust in one's fellow group members does generalize, at least to the extent in the present study of trusting the experimenter.

Necessarily, generalization of the results of this study to a clinic population must wait upon replication with actual therapy groups. However, such research seems clearly justified on the basis of the data obtained herein.

Whalen's rating scale as modified in the present study has shown itself to be highly reliable; the raters reported no great difficulty in distinguishing among the categories. Hence it would seem to be an instrument of choice for further research in this area.

No conclusions can be drawn regarding the reasons for the "conservative shift" obtained from our subjects. The present research fortunately included videotaping of the actual discussion-to-consensus sessions. Analysis of the group interaction in such sessions would seem to be a natural outgrowth of this study and perhaps have a bearing on the interactional aspects of the risky shift phenomenon.

APPENDIX A

Interpersonal Trust Scale (Rotter, 1967)

General Opinion Survey

This is a questionnaire to determine the attitudes and beliefs of different people on a variety of statements. Please answer the statements by giving as true a picture of your own beliefs as possible. Be sure to read each item carefully and show your beliefs by marking the appropriate number of your answer sheet.

If you strongly agree with an item, circle number 1. Circle number 2 if you mildly agree with the item. That is, circle number 2 if you think the item is generally more true than untrue according to your beliefs. Circle number 3 if you feel the item is about equally true as untrue. Circle number 4 if you mildly disagree with the item. That is, circle number 4 if you feel the item is more untrue than true. If you strongly disagree with an item, circle number 5.

1. Strongly agree
2. Mildly agree
3. Agree and disagree equally
4. Mildly disagree
5. Strongly disagree

1. Most people would rather live in a climate that is mild all year around than in one in which the winters are cold.

2. Hypocrisy is on the increase in our society.

3. In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy.

4. This country has a dark future unless we can attract better people into politics.

5. Fear of social disgrace or punishment rather than conscience prevents most people from breaking the law.

6. Parents usually can be relied upon to keep their promises.

7. The advice of elders is often poor because the older person doesn't recognize how times have changed.

8. Using the honor system of not having a teacher present during exams would probably result in increased cheating.

9. The United Nations will never be an effective force in keeping world peace.

10. Parents and teachers are likely to say what they believe themselves and not just what they think is good for the child to hear.

11. Most people can be counted on to do what they say they will do.

12. As evidenced by recent books and movies morality seems on the downgrade in this country.

13. The judiciary is a place where we can all get unbiased treatment.

14. It is safe to believe that in spite of what people say, most people are primarily interested in their own welfare.

15. The future seems very promising.

16. Most people would be horrified if they knew how much news the public hears and sees is distorted.

17. Seeking advice from several people is more likely to confuse than it is to help one.

18. Most elected public officials are really sincere in their campaign promises.

19. There is no simple way of deciding who is telling the truth.

20. This country has progressed to the point where we can reduce the amount of competitiveness encouraged by schools and parents.

21. Even though we have reports in newspapers, radio and television, it is hard to get objective accounts of public events.

22. It is more important that people achieve happiness than that they achieve greatness.

23. Most experts can be relied upon to tell the truth about the limits of their knowledge.

24. Most parents can be relied upon to carry out their threats of punishment.

25. One should not attack the political beliefs of other people.

26. In these competitive times one has to be alert or someone is likely to take advantage of you.

27. Children need to be given more guidance by teachers and parents than they now typically get.

28. Most rumors usually have a strong element of truth.

29. Many major national sport contests are fixed in one way or another.

30. A good leader molds the opinions of the group he is leading rather than merely following the wishes of the majority.

31. Most idealists are sincere and usually practice what they preach.

32. Most salesmen are honest in describing their products.

33. Education in this country is not really preparing young men and women to deal with the problems of the future.

34. Most students in school would not cheat even if they were sure of getting away with it.

35. The hordes of students now going to college are going to find it more difficult to find good jobs when they graduate than did the college graduates of the past.

36. Most repairmen will not overcharge even if they think you are ignorant of their specialty.

37. A large share of accident claims filed against insurance companies are phony.

38. One should not attack the religious beliefs of other people.

39. Most people answer public opinion polls honestly.

40. If we really knew what was going on in international politics, the public would have more reason to be frightened than they now seem to be.

APPENDIX B

Time in .5-sec. Intervals in the Six Response Categories by Rater for the Six Groups in Each Treatment Condition

1. Personal Discussion

Interpersonal-Openness			Therapy-Group			Control Group		
	Rater			Rater			Rater	
Group	R	M	Group	R	M	Group	R	M
1	948	997	3	29	30	2	19	21
4	708	934	6	0	0	5	0	0
7	1071	1073	9	0	0	8	0	0
11	107	110	12	0	0	10	0	0
14	1395	1470	15	19	18	13	0	0
17	1591	1630	18	0	0	16	0	0
	5820	6214		48	48		19	21

2. Feedback

Interpersonal-Openness			Therapy-Group			Control-Group		
	Rater			Rater			Rater	
Group	R	M	Group	R	M	Group	R	M
1	0	0	3	0	0	2	48	52
4	30	36	6	0	0	5	6	5
7	493	501	9	0	0	8	0	0
11	0	0	12	0	0	10	4	0
14	70	80	15	0	0	13	0	0
17	46	39	18	0	0	16	0	0
	639	656		0	0		58	57

3. Impersonal Discussion

Group	Interpersonal-Openness Rater R	M
1	1483	1428
4	1419	1218
7	419	446
11	2168	2169
14	727	698
17	360	334
	6576	6293

Group	Therapy-Group Rater R	M
3	2260	2223
6	2291	2316
9	2065	2150
12	2220	2257
15	1958	1979
18	2221	2197
	13,015	13,122

Group	Control-Group Rater R	M
2	2088	2072
5	2244	2274
8	2191	2159
10	2316	2336
13	2194	2177
16	2216	2211
	13,249	13,229

4. Group Process

Group	Interpersonal-Openness Rater R	M
1	0	0
4	54	10
7	192	160
11	0	0
14	148	145
17	0	0
	394	315

Group	Therapy-Group Rater R	M
3	0	0
6	0	10
9	50	44
12	0	0
15	216	208
18	0	0
	266	262

Group	Control-Group Rater R	M
2	35	30
5	25	26
8	0	0
10	7	6
13	0	0
16	71	71
	131	127

Group	Interpersonal-Openness Rater R	M
1	87	70
4	113	116
7	135	131
11	115	109
14	91	89
17	185	158
	726	673

5. Descriptive Aspects of Communicative Speech

Group	Therapy-Group Rater R	M	Group	Control-Group Rater R	M
3	157	154	2	97	93
6	116	119	5	145	130
9	266	233	8	175	174
12	198	183	10	111	123
15	151	166	13	175	175
18	117	126	16	187	194
	1005	981		890	889

Group	Interpersonal-Openness Rater R	M
1	0	0
4	46	35
7	41	16
11	12	15
14	0	0
17	0	0
	99	66

6. Unscoreable Utterances

Group	Therapy-Group Rater R	M	Group	Control-Group Rater R	M
3	0	0	2	25	35
6	9	0	5	0	0
9	0	0	8	0	0
12	0	0	10	0	20
15	26	26	13	0	0
18	63	70	16	0	0
	98	96		25	55

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BIOGRAPHICAL SKETCH

Sallye B. Peterson was born in Shreveport, Louisiana, on October 31, 1934, and grew up there, graduating from Byrd High School in 1951. She received her B.A. magna cum laude from Louisiana State University in 1965 and her M.A. in Clinical Psychology in 1967.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Hugh C. Davis, Jr., Chairman
Professor of Clinical Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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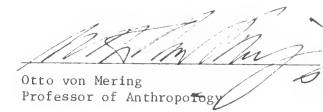

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This dissertation was submitted to the Graduate Faculty of the Department of Clinical Psychology in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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